

Esters for Monofunctional Alcohols as PVC
Plasticizers, by Franz Würetlin, Hermann Klein,
19 pp.

GERMAN, per, Kunststoffe, Vol XLVI, 1956,
pp 3-8.

CIA/FDD XX-412

NOT RELEASABLE TO FOREIGN NATIONALS

Sci - Chem
Mar 58

60,597

IAC INTERNAL USE ONLY

Extruders with Fast-Moving Screws, by E. Beck,
6 pp.

GERMAN, per, Kunststoffe, Vol XLVI, No 1, 1956,
pp 18-20.

SIA Tr 57-1709

Sci - ~~1956/14~~ Mechanics

Jul 58

67,903

Quantitative Determination of Urea and Melamine
Formaldehyde Condensation Products, by G. Widmar.

GERMAN, per, Kunststoffe, Vol XLVI, No 8, 1956,
pp 359-362.

ASLIB-GE39

Sci

Aug 59

93,531

Identification of Plastics and Resins as Well as
Products Thereof by Their Infrared Spectra, by D
Hummel, 19 pp.

GERMAN, rer, Kunststoffe, Vol XLVI, No 1, 1956,
pp 442-450.

ATS-67J180

Sci

Jul 59

92,678

63-14171

Leuchs, Othmar.

THE PLASTICIZATION OF POLYVINYL CHLORIDE.
[1963] 16p. (figs. omitted) 33 refs.

Order from SLA \$1.60

63-14171

Trans. of Kunststoffe (West Germany) 1956, v. 46,
no. 12, p. 547-554.DESCRIPTORS: *Polyvinyl chloride, *Plasticizers,
Molecular structure, Polymers, Binders, Electrical
properties.

The molecule of a plasticizer contains polar and non-polar groups. The amount ratio of polar to non-polar groups is decisive for the compatibility of the plasticizer in PVC. The polar groups serve as binders. Non-polar molecule components can be divided into polarisable (aromatic) and non-polarisable (aliphatic), whereby two opposite types of plasticizer can be dis-

(Materials-Plastics, TT, v. 10, no. 3) (over)

1. Leuchs, O.

Office of Technical Services

Urea-Formaldehyde Condensate as Glue and Binding
Material in the Wood Processing Industry, by G.
Hegen.

GERMAN, per, Kunststoffe, Vol XLVI, 1956, p 55-58.

INSDOC-91004

Sci

Jul 59

92,709.11

The After-Treatment of Polyamide Mouldings, by
B. Olsen.

GERMAN, per, Kunststoffe, Vol XLVI, No 3, 1956,
pp 131-134.

T.I.L. T. 4678

Sci - Chemistry

36,927

Aug 1956

Measuring the Hardness of Plastics, by W. Gohl.

GERMAN, no per, Kunststoffe, Vol XLVI, No 4, 1956,
pp 139-143.

T.I.L. T 4707

39,306

Sci - Engineering
Sep 56 CTS

Determination of the Gas Permeability of Synthetic
Folts According to the Principle of Change in
Pressure and Volume Measurements, Part I. Accuracy
of Measurement and Sensitivity.

GERMAN, per, Kunststoffe, Vol XLVI, 1956, pp 143-147.

AEC Tr 2637

Sci - Physics

40,176

Chemical Substance in Organic Isolating Material
by C. Brinot.

French, per, Monatsh, Vol. XLVI, No 4, 1956,
p. 189-191.

TIL Tr 4706

Chem
Jan 56

57,204

Part I. Straight Through and Crosshead Dies for
Tubing, by Gerhard Schenkel, 15 pp.

GERMAN, per, Kunststoffe, Vol XLVI, No 6, 1956,
pp 176-180.

NOT RELEASABLE TO FOREIGN NATIONALS

CIA/FDD XX-391

58,561

Sci - Eng

Feb 58

IAC INTERNAL USE ONLY

Tubing from Low Pressure Polyethylene, by K.
Richard and G. Friedrich.

GERMAN, for, Kunststoffe, Vol XLVI, 1956, pp
183-190.

ASLIB-GB57

Sci

Aug 58

71.725

Part II. Blow Extrusion and Wide-Sheet Dies;
Dies for Multicolor Profiles, by Gerhard Schenkul,
13 pp.

GERMAN, per, Kunststoffe, Vol. XLVI, 1956, pp 221-226.

NOT RELEASABLE TO FOREIGN NATIONALS

CIA/FDD XX-392

Sci - Eng

Feb 58

IAC INTERNAL USE ONLY

58,562

The Cold Stretching of Low-Pressure
Polyethylene, by K. Richard, E. Gaube, 22 pp.

GERMAN, per, Kunststoffe, Vol XLVI, 1956,
pp 262-269.

CIA/PDD: XX-252

NOT RELEASABLE TO FOREIGN NATIONALS

Sci - Chemistry
Feb 1957 CTS/dex
IAC INTERNAL USE ONLY

44, 195

Adhesion Studies Packaging Materials. Part I. Influence of Joint Thickness Upon Strength of Adhesion Sites, by W. Bartusch, 13 pp.

GERMAN, per, ^uKunststoffe, Vol XLVI, No 6, 1956, pp
274-280. _{st}

ATS-48J19G

Sci

Jul 59

92,674

Practical Experiences with Twin-Screw
Extruders and their Utilization in Design,
by K. Tanner.

GERMAN, per, Kunststoffe, Vol XLVI, No 9,
Sep 1956, pp 429-438.

ASLIB-GB39

Sci

Aug 58

72,391

Hummel, Dieter.
IDENTIFICATION OF PLASTIC MATERIALS,
SYNTHETIC RESINS AND THEIR PRODUCTS BY
MEANS OF THEIR INFRA-RED SPECTRA. [1963]
14p. (figs. omitted) 33 refs.
Order from SLA: \$1.60

63-14168

Trans. of Kunststoffe (West Germany) 1956, v. 46,
no. 10, p. 442-450.

DESCRIPTORS: *Plastics, Materials, Identification,
*Infrared spectroscopy, *Spectrum analyzers,
*Plastic paints.

The theoretical and practical limitations of IR
spectroscopy are taken up a system for the infrared
analysis of synthetic and paints is reported.

(Materials--Plastics, TIT, v. 10, no. 2)

63-14168

1. Hummel, D.

Office of Technical Services

Study of Macromolecular Substances by Means of
Osmotic Measurements, by H. Hellfritz, H. Kramer.

GERMANY, per, Kunststoffe, Vol XLVI, No 10, 1956,
pp 450-459.

Assoc Tech Sv

44H130

\$28.15

52,249

Sci - Chem
Sep 57

Properties of Vestolen, A Low Pressure Poly-
ethylene Made by the Ziegler Process, by
O. Wick, H. König, 14 pp.

GERMAN, per, Kunststoffe, Vol XLVI, 1956,
pp 460-466.

NOT RELEASABLE TO FOREIGN NATIONALS

CIA/FDD XX-304

Sci - Chemistry

Jun 57

IAC INTERNAL USE ONLY

49, 154

Bier, G. and Krämer, H.
POLYMERIZATION OF VINYL CHLORIDE AND
STRUCTURE OF POLYVINYL CHLORIDE. [1963] 9p.
(tables figs. omitted) 20 refs.
Order from SLA \$1.10

63-14170

Partial trans. (p. 498-501, 503-505 (excerpts))
of Kunststoffe (West Germany) 1956, v. 46, no. 11,
p. 498-505.

A trans. of section on Reduction PVC (p. 504-505) is
available from SLA \$0.10 as 63-14176 [1963] 3p.

DESCRIPTORS: *Polyvinyl chloride, Molecular
structure, *Vinyl chlorides, Polymerization, Vinyl
radicals, Acetates, Osmotic pressure, Titration,
*Polyethylene plastics, *Heat-resistant plastics.

Contents:

End groups

End groups proceeding from additives

(Materials--Plastics, IT, v. 10, no. 4)

(over)

63-14170

I. Bier, G.
II. Krämer, H.

Office of Technical Services

by Dr B. H. Von Daimler.

GERMAN, per, Kunststoffe, Vol XLVI, pp 508-514.

*JPRS (for Picatinny Arsenal)

24/4/59

Dielectric Material Properties of Synthetics and Other
Non-Conductors, by B. H. Dainler, Oberbruch, Bez. Aachen,
26 pp.

GERMAN, per, Kunststoffe, Vol XLVI, No 11, 1956, pp 503-
514.

FDD/X-3619

Sci

Jul 59

Plasticizing of Polyvinyl Chloride, by O. Leuchs,
30 pp.

No 12,
GERMAN, ~~per~~, Kunststoffe, Vol XLVI, 1956, pp 547-554.

CIA/FDD XX-3(8)
NOT RELEASABLE TO FOREIGN NATIONALS

Sci - Chem

Jan 58

IAC INTERNAL USE ONLY

57, 575

Polyvinyl Chloride Agglomerates, by G. Wick, H
Konig

GERMAN, per Kunststoffe. Vol XLVI, No 12, Dec 1956,
p 583 587

ASLIB-GB39

Sci

Jul 59

92,688

Formation of High Polymers by Metal Reinforce-
ment of Polymeric Oil-Containing Film-Formers
and Various Types of Synthetic Resins, by F.
Schlenker, 16 pp.

GERMAN, per, Ernststoffe, Vol XLVII, 1957,
pp 7-14.

ATB 45K203

ATB 45K203

Sci - Chem

Feb 61

138,283

Testing of ~~Soft~~ Hard Foam Materials, Shearing
Test. German Industrial Standards: DIN 53 422,
4 pp.

GERMAN, ~~per~~, Kunststoffe, Vol XLVII, 1957, pp 31, 32.

AEC SCL-T-322

Sci - Chem
9 Mar 61

141,563

Rotational Moulding of PVC Pastes, by H.
Lembachoff.

GERMANY, per, Kunststoffe, Vol XLVII, No 1, 1957,
pp 49-52.

ASLTB-GB39

Encl.
Aug 58

70,823

Multi-Purpose Coating Machine, by H. Devant.

GERMAN, per, Kunststoffe, Vol XLVII, No 2, 1957,
p 74.

ASLIB-QB39

Sci
Aug 58

70, 757

High-Molecular Ester Plasticizers, Classification Composition, Testing and Technological Properties, by Dr. K. Zohrer, Dr. A. MARE.

GERMAN, par. Kunststoffe, Vol XLVII, No 3, 1957, PP 102-113.

ASLIB-CE39

Sci
Aug 58

70,832

Polyvinyl Chloride Acetate Plastisols and Organosols,
by W. R. Jones.

GERMAN, per, Kunststoffe, Vol XLVII, No 3, Mar 1957,
pp 116-118.

ASLIB-0839

574

Sci

Aug 59

95,389

Novodur, by P. Schneider, A. Wunderer.

CHERMAN, per, Kunststoffe, Vol. XLVII,
No 4, 1977, pp 147-151.

CSIRO

Sci - Chem
Jun 62

199,586

PVC Pastes and Their Anchoring to Metal Surfaces,
by H. Koch, W. Sommer.

GERMAN, per, Kunststoffe, Vol XLVII, No 4, 1957,
pp 153-156.

SLA 60-16837

Sci

Dec 60

135,618

Kalkhof-Rose and Bauer.
METHYLACRYLATE MOLDING COMPOUNDS FOR
LARGE MOLDED PARTS. [1961] 8p. (3 figs. 2
tables omitted).
Order from SLA \$1.10

62-10603

Trans. of Kunststoffe (West Germany) 1957, v. 47,
no. 4, p. 156ff.

DESCRIPTORS: *Acrylic resins, Gels, Physical
properties, Plastics industry, Molding.

Starting from the known treatment of plastic mixtures
of polymeric and monomeric methyl acrylate in
dentistry, a technically interesting method has been
developed, for obtaining storable molding compounds,
and therefrom, molded parts, at low temperatures of
about 50°C. and relatively short polymerization times
of about 20 minutes. The use of redox systems
(Materials--Plastics, TT, v. 8. no. 9) (over)

62-10603

I. Kalkhof-Rose
II. Bauer

Office of Technical Services

62-14051

Noble, Erch.

CONCENTRATION-DEPENDENT PLASTICIZER VOL-
ATILITY OF SOME PLASTICIZERS OUT OF PLAS-
TICIZED POLYVINYL CHLORIDES. [1.51] 9p.
(4 figs. footnotes omitted).
Order from SLA \$1.10

62-14051

Trans. of Kunststoffe (West Germany) 1957, v. 47
(no. 4) p. 180-182.

DESCRIPTORS: *Vinyl chlorides, Polymers, *Plas-
ticizers, Mixtures, Phase studies.

A method is described for testing the plasticizer vol-
atility in PVC mixtures in relation to the plasticizer
concentration, and for differentiating between even
very similar plasticizers. Differences appear at var-
ious stages in the preparation, leading to the conclu-
sion that an equilibrium is set up between the PVC
phase and the plasticizer. (Author)
(Materials--Plastics, TT, v. 8, no. 3)

1. Noble, E.

Office of Technical Services

Extrusion of Methacrylates, by E. Friederich.

GERMAN, per, Kunststoffe, Vol XLVII^Y, 1957,
pp 218-223.

CSIRO

Sci - Chem
May 62

196,407

Practical Methods for Processing Products
from Low-Pressure Polyethylene, by E.
Rottner, 8 pp.

GERMAN, per, Kunststoffe, Vol XLVII, No 4,
1957, pp 227-231.

Assoc Tech Serv-32J18G

Sci

Aug 58

72,442

Determination of Thermal-Conductivity Values of
Plastics, by O. Henning.

~~Kunststoff~~, per, Kunststoffe, Vol IV, 1957,
pp 265-268.

REC-SC-T-64-1641

Sci - Phys

Aug 65

267,332

Recent Experiences on Frictional Properties
of Polyamides. Part I, by H. R. Jacobi, 12
pp.

GERMAN, per, Kunststoffe, Vol XLVII, No 5, 1957,
pp 234-239.

Assoc Tech Serv-3LJ18R

Sci

Aug 58

72,489

63-14175

Wick, Georg and König, Helmut.
VESTOLIT S: A SUSPENSION-PVC. 16 July 57, 5p.
(figs. tables omitted) 7 refs.
Order from SLA \$1.10

63-14175

I. Title: Vestolit S
I. Wick, G.
II. König, H.

Trans. of Kunststoffe (West Germany) 1957, v. 47,
no. 6, p. 299-302.

DESCRIPTORS: *Polyvinyl chloride, Colloids, Polymerization, Mechanical properties.

Vestolite S is a suspension PVC of many uses. It supplements the emulsion types predominating until now in Germany and makes possible the drawing in of more fields of use to the PVC area. While the higher degrees of polymerization with K values between 70 and 80 are for the most part reserved to processing with plasticizers, material of average K values between 50 and 65 are suitable for processing without plasticizer, so that they present new possibilities and variations in the production of pipes, foils and flatware. (Author)

(Materials--Plastics, TT,
v. 10, no. 2)
Office of Technical Services

Structure Investigations of Diacetyl and Other
Polymeric Acroleins, by Rolf C. Schulz, 31 pp.

GERMAN, par, Kunststoffe, Vol. XXVII, No. 5, 1957,
pp 303-312.

SLA 59-15697

Sci
Dec 59
Vol. 2, No 4

103,125

Schulz, Rolf C.
INVESTIGATIONS ON THE STRUCTURE OF DIAC-
RYL AND OTHER POLYMERIC ACROLEINS, 5.
[Paper] presented in extract form at the Macromolecu-
lar Colloquium (held at) Freiburg, 8 Mar 57; inaugural
Dissertation, Mainz U. (West Germany). [1961] 35p.
36 refs.
Order from SLA \$3.60

61-16336

Trans. of Kunststoffe (West Germany) 1957, v. 47,
no. 6, p. 303-312.
Another translation is available from SLA m\$3.00,
ph\$6.30 as 59-15697 [1959] 31p.

DESCRIPTORS: *Acroleins, Polymers

For abstract see Technical Translations 2: 272, 1999.

(Materials--Plastics, TT, v. 6, no. 5)

61-16336

I. Schulz, R. C.
II. Title: Macromolecular...
III. Mainz U. (West Germany)

180469

Office of Technical Services

The Influencing of the Properties of Plastics by
Energy-Rich Radiation, by K. Mayaw, M. J. G.

GERMAN, par, Kunststoffe, Vol XXIII, 1953, 2, 3,
pp 409-412.

SIA 59-19928

Sci
Jan 60
Vol 2, No 5

104,798

The Extrusion of Polyethylene Film Sheet,
by H. G. Bernhardts.

CHIMIAN, pt. 1, Kunststoffe, Vol XLVII, No 8,
1957. pp 435-439.

CSIRO

705 - Chem
vol 82

207, 735

63-14177

1. Title: Leavening agents
1. Scheurlen, H. A.

Scheurlen, H. A.
METHODS FOR THE PRODUCTION OF FOAM
MATERIALS WITH SPECIAL CONSIDERATION OF
LEAVENING AGENTS. [1963] 25p. (figs. omitted)
58 refs.
Order from SLA \$2. 60 63-14177

Trans. of reprint from Kunststoffe (West Germany)
1957, v. 47, no. 8, p. 446-455.

DESCRIPTORS: Production, *Foams, *Foam rubber,
*Expanded plastics, Gases, *Plastics, Rubber.

The importance of leavening agents for the production of
foam materials is briefly sketched by a survey of today's
foaming methods. The need exists of being able to put
in foaming agents which are as universal as possible,
that is, usable through a wide temperature range and
for the greatest possible number of plastics. Some
methods, which make possible an extensive influencing
of the qualities of a leavening agent, are here described.
(Author)

(Materials--Plastics, TT,
v. 10, no. 3)
Office of Technical Services

Vortex-Sintering Developments and Recent Discoveries,
by E. GUMMER. UNCLASSIFIED

GRIMMAN, per, Kunststoffe, Vol XLVII, No 8, 1957,
pp 510-512.

TIL Tr 4856

Sci - Phys (7)
Jun 58

64,493

62-10599

Jordan, Otto.
PRACTICES IN BONDING THE NEWER PLASTICS.
[1961] 14p.

Order from SLA \$1.60

62-10599

Trans. of Kunststoffe (West Germany) 1957, v. 47
[no. 8] p. 521-524.

DESCRIPTORS: *Plastics, *Bonding, Amides,
Urethanes, Polymers

It is shown how and within what limits it is possible to
get usable adhesive bonds with polyamides and poly-
urethanes. Methods are discussed for making poly-
fluorocarbons adherable. Likewise the possibilities
with silicones are treated. Finally the bonding
of polycarbonates and of terephthalic acid polymers,
and of polystyrene and of tempered plastics are
mentioned and several problems of bonding different
plastics with each other and with other materials are
touched on. (author)

(Materials - Plastics, TT, v. 7, no. 11)

Office of Technical Services

Process for Recording Changes in the
Flexibility of Plastic Films With Tempera-
ture, by W. Vogt.

GERMAN, pat, Kunststoffe, Vol XLVII,
1957, pp 533-536.

CSIRO

199,646

Sci - Phys
May 62

Direct-Current Measurements of Technical (Plasticized) and Pure (Unplasticized) Polymers, by
Fritz-Henrich Kallweit, 12 pp.

GERMAN, per, Kunststoffe, Vol XLVII, No 11,
1957, pp 651-655. CIA 643483

Picatinny Arsenal 24
OTIA 2415

Sci - Chem

Mar 59

83,430

Rysavy, D.
PROPERTIES OF THE PASTE-FORMING SORTS OF
PVC. [1963] 10p. 19 refs.
Order from SLA \$1.10

63-14178

Trans. of Kunststoffe (West Germany) 1957, v. 47,
no. 12, p. 683-685.

DESCRIPTORS: •Polyvinyl chloride, Particles,
Plasticizers, Colloids, Polymerization, Mechanical
properties.

Resistance of various kinds of PVC to the dissolving
effect of plasticizer was studied. From the measure-
ments made it was found that the one decisive factor
for the dissolving speed of PVC (when the K value lies
in the range of from 65 to 80) is the amount of contact
surface between PVC and plasticizer, which is deter-
mined by the physical structure of the PVC particles.
(Materials--Plastics, IT, v. 10, no. 3) (over)

63-14178

1. Title: Pastes
1. Rysavy, D.

Office of Technical Services

Rysavy, D.
PRODUCTION OF PASTE-FORMING TYPES OF PVC
IN ATOMIZING EQUIPMENT. [1963] 6p. (figs.
omitted) 11 refs.
Order from SLA \$1.10

63-14179

Trans. of Kunststoffe (West Germany) 1958, v. 48,
no. 3, p. 108-110.

DESCRIPTORS: •Polyvinyl chloride, Production,
Atomization, Industrial equipment, Colloids, Driers
(Apparatus), Polymerization, Quality control.

A discussion of the method of preparing paste-form-
ing PVC by drying of the latex won by emulsion poly-
merization in an atomizer dryer. Detailed considera-
tion is given to the conditions of preparation which
ensure a product of the desired qualities, and to the
reasons which cause the variations in quality of these
products.

(Materials--Plastics, TT, v. 10, no. 3)

63-14179

1. Title: Pastes
1. Rysavy, D.

Office of Technical Services

Analysis of Polyesters by Paper Chromatography,
by I. Arendt, H. J. Schenck, 6 pp.

QUEMME, pet., Kunststoffe, Vol. XLVIII, No 3,
1958, pp 111-113.

SLA 60-16884

Sci
26 May 62
Vol IV, No 8

198, 255

Synthetic Resins for Plastics Reinforced
by Glass Fibre, by E. Sauer.

GERMAN, per, Kunststoffe, Vol XLVIII,
No 5, 1958, pp 205-212.

CSIRO

Sci - Phys
Jul 62

204,909

Kuhn, Walter.
POLYETHYLENE: ITS PRETREATMENT AND
PRINTABILITY. [1961] 18p. (12 figs. omitted) 4 refs.
Order from SLA \$1.60 62-10519

Trans. of Kunststoffe (West Germany) 1958, v. 48,
no. 6, p. 242-249.

DESCRIPTORS: *Packaging, Materials, Plastics,
*Polymers, *Ethylenes, Processing, Physical
properties, *Printing.

(Materials--Plastics, TT, v. 7, no. 10)

62-10519

I. Kuhn, W.

Office of Technical Services

The Physical Properties of Monomeric Acrolein and
Several Polyacroleins, by R. C. Schultz,

GERMAN, per, Kunststoffe, Vol XLVIII, No 6, 1958,
pp 257-261.

ATS 344-GJ

47-121139-5

Sci - Chem

Aug 60

123,329

Physiological Evaluation of Plastic Products in the
United States of America, by D. D. McCollister,
W. J. Sauber, 10 pp.

GERMAN, per, Kunststoffe, Vol XLVIII, No 7, 1958,
pp 350-352.

SLA 59-15530

Sci
Dec 59
Vol 2, No 4

103, 130

Polypropylene, by Bier, Gerhard, 29 pp.

GERMAN, Per, Kunststoffe, 1958, Vol XLVIII, No 6,
pp 354-362.

SLA 59-15592
59-15005

Sci
Oct 59
Vol 2, No 3

99,882

Baumann, H.

PROPERTIES OF FOAMED COLD-SETTING UREA-FORMALDEHYDE RESINS. [1963] 16p (figs. tables omitted)

Order from SLA \$1.60

63-18526

Trans. of Kunststoffe (West Germany) 1958 [v. 48] no. 8 [p. 362-364] and no. 9 [p. 406-408].

DESCRIPTORS: *Urea-formaldehyde resins, *Amino plastics, *Expanded plastics, Physical properties, Chemical properties, Mechanical properties.

Tests were made on the following properties: shrinkage; resistance to cold, heat, aging, chemicals, vibration, fungi, and other materials; formation of condensation; thermal conductivity; thermal conductivity; water absorption; flammability; sound absorption; and transmittance of rays. The test methods were aimed mainly at requirements which exist in practical use. On the (Materials--Plastics, IT, v. 10, no. 11) (over)

63-18526

I. Baumann, H.

Office of Technical Services

Brandenburger, Kurt.
SELF-ADAPTING TOOL IN HIGH FREQUENCY
WELDING. [1961] 7p. (5 figs. omitted).
Order from SLA \$1.10 62-10057

Trans. of Kunststoffe (West Germany) 1958, v. 48,
no. 8, p. 391-393.

DESCRIPTORS: *Machine tools, Plastics, Sheets,
High frequency, *Welding rods, *Electric welding,
Electrodes.

Machinery--

(Manufacturing, IT, v. 7, no. 9)

62-10057

I. Brandenburger, K.

Office of Technical Services

62-10372

1. Goldschmidt, H.

Goldschmidt, H.
THE USE OF ABRASIVE PAPERS AND FABRICS IN
PLASTICS. [1961] 3p. (2 figs. omitted).

Order from SLA \$1.10

62-10372

Trans. of Kunststoffe (West Germany) 1958, v. 48
[no. 8] p. 393.

DESCRIPTORS: *Plastics. *Abrasives. Grinding
wheels.

Experiences are reported in which plastics were
ground with abrasive paper or fabrics. In abrading
plastics, there is a distinction between duroplastic
and thermoplastic. The former is usually polished
dry, the latter wet. (Author)

(Materials--Plastics, TT, v. 7, no. 9)

Office of Technical Services

Graft Polymerization, by F. Pignatelli, 21 pp.

GERMAN, par: Kunststoffe, Vol KUNST, Sep 1959,
pp 398-402.

RIS Rept 61045

SUN 10-11-59

Sci - Chem
Sep 59
Vol 2, No 1

97,895

Bonding of Hard p.v.c. Sheets With Chipboard
and Fibreboard, by C. Kubitzky.
GERMAN, per, Kunststoffe-Praxis, Vol XLVIII,
No 11, 1958.
CSR Co

KEEur - Germany
Econ
Jun 64

261,268

Mienes, Karl.
PERFECTING MATERIALS AND TECHNIQUES IN
THE HIGH-POLYMER FIELD. From a lecture at the
Symposium on Macromolecular Materials of the Swiss
Chemical Society, Zurich, 11 Oct 58. [1963] 12p.
(figs. omitted) 16 refs.
Order from SLA \$1.60 63-14181

Trans. of Kunststoffe (West Germany) 1958, v. 48,
no. 11, p. 499-504.

DESCRIPTORS: *Plastics industry, *Thermoplastics,
Elastomers, Polymers, Material forming, Mixtures,
Polymerization, *Expanded plastics.

The plastics industry is increasingly preoccupied with
adapting high-polymer qualities to technical proce-
dures and the requirements of practical use. This
report presents examples of new developments and
discusses processes adapted to the peculiarities of
the improved products. (Author)

63-14181

- I. Mienes, K.
- II. Title: Symposium ...

(Materials--Plastics, TT,
v. 10, no. 2)

Office of Technical Services

The Measurement of the Melting Point or of the
Flow Temperature of Polymers with a Melting Point
Autograph, by K. Uberreiter, H. J. Orthmann, 16 p.

GERMAN, part, Kunststoffe, 1958, Vol XLVIII, No 11,
pp 525-530.

SLA 59-20289

Sci
Feb 60
Vol 2, No 12

108,255

Effect of Different Factors on the Curing of
Anisotropic Polyesters at Elevated Temperatures,
A. Thoden, B. Herdtgen, 13 pp.

GERMAN, part, Werkstoffe, Vol. XLII, No. 1, 1961,
pp 9-14.

AMS 701300

SEP 59

Sci - Chem

SEP 59

VOL 2, NO 2

77783

New Soviet Process for Synthesis of Polymers;
Polyrecombination, by R. Ulbricht, 4 pp. USSR

GERMAN, per, Monatshfte, No 1, 1959, pp 23, 24.

AFDC MEL-319/V

15 APR 1960

Sol - China

Apr 60

112,935

Frei, Hans-Helmut.
HOSTALIT Z, A NEW PLASTIC BASED ON PVC.
[1963] 18p. (fig. omitted) 9 refs.
Order from SLA \$1.60

63-14183

Trans. of Kunststoffe (West Germany) 1959, v. 49,
no. 2, p. 50-55.

DESCRIPTORS: *Polyvinyl chloride, Polymerization,
Mechanical properties, Plasticizers.

A new plastic-polyblend of PVC and chlorinated
polyolefin is reported. According to procedure there
is obtained hard, shock-resistant to soft, flexible
product. The mechanical, thermic and electrical
properties, their chemical and solvent resistance,
and also the processing methods are described with
special reference to the manifold possibilities of
modification and fields of application. (Author)
(Materials--Plastics, TT, v. 10, no. 3)

63-14183

1. Title: Hostalit Z
1. Frei, H.-H.

Office of Technical Services

61-20976

Niklas, H. and Eiffländer, K.
LONG-TERM BEHAVIOR OF POLYETHYLENE AND
POLYVINYLCHLORIDE PIPES (Zeitstandverhalten von
Rohren aus Polyäthylen u Polyvinylchlorid). [1961]
[18]p. 4 refs.
Order from SLA \$1.60

61-20976

Trans. of Kunststoffe (West Germany) 1959, v. 49,
no. 3, p. 109-113.

DESCRIPTORS: Polymers, *Ethylenes, *Vinyl chlo-
rides, *Pipes, *Plastic tubing, Elasticity, Plasticity,
Deformation, Stresses, Fracture (Mechanics), Life
expectancy.

When thermoplastic materials are exposed to long-
term stress the elongation increase with time is pro-
portional to the stress only at very low stresses.
Higher stresses cause a different behavior of elastic
(Materials--Plastics, TT, v. 7, no. 6) (over)

I. Niklas, H.
II. Eiffländer, K.

Office of Technical Services

TT-65-11966

Field 13H

TT-65-11966

Mange, E. O. A.
OUTPUT IMPROVING RULE- AND CONTROL-
MEASURES IN THE WORK OF EXTRUDERS. 6p.
order from SLA: S1110 as TT-65-11966

I. Mange, E. O. A.

Trans. of Kunststoffe (West Germany) v49 n4 p166-8 1959.

MR 622

Puchs, O., and Frey, H. H.
EFFECT OF LOW CONCENTRATIONS OF PLASTICIZER IN VINYL CHLORIDE POLYMERS. Presented to the Expanded Macromolecular Colloquium, Freiburg, 6-8 Mar 58. [1968] [11]p. (figs. omitted) 8 refs.
Order from SLA \$1.60 63-14184

Trans. of Kunststoffe (West Germany) 1959, v. 49, no. 5, p. 213-216.

DESCRIPTORS: Polymers, "Polyvinyl chloride, "Plasticizers, Vinyl radicals, Chloride, Mechanical properties, Molecular structure.

The brittling effect occurring in PVC and vinyl chloride mixed polymers with low plasticizer concentrations is explained by the assumption that the plasticizer molecule in low concentrations causes, by solvation, above all, a stretching of the macro-
(Biological Sciences--Pharmacology, FT, v. 10, no. 1)
(over)

63-14184

- I. Puch, 1958.
- II. Frey, 1958.
- III. Frey, 1958.

Office of Technical Service

Paper Chromatographic Analysis of Acids in
Polyesters, by P. Fijolka, R. Kayler, I. Lenz,
11 pp.

GERMAN, per, Kunststoffe, Vol XLIX, No 5, 1959,
pp 222-225.

SLA 60-28787

Sci

Apr 61

OTS, Vol V, No 1

145,177

Solution Viscosity Measurements of Commercial
Polyolefins; A Proposal for a Standard,
by Hermann, Hessler, 5 pp.

GERMAN, per, Kunststoffe, Vol XLIX, No 5,
1959, pp 230-231.

OTS 60-16498

Sci
Mar 62
Vol 4, No 4

187, 756

Stretching and Shrinkage of PVC Film, by
H. Haldemanger.

GERMAN, per, Kunststoffe, Vol XLIX, No 6,
1959, pp 270-274.

CSIRO

Sci - Phys
Aug 62

207,326

Analysis of Polyesters by Paper Chromato-
graphy, by I. Arendt, H. J. Schenck, 4 pp.

GERMAN, per, Kunststoffe, Vol XLIX,
No 7, 1959, pp 321-322.

SLA 60-16870

Sci.
Vol IV, No 7
Apr 62

192,622

Theory of Gas Permeability of Plastic Foils, by
N. Buchner, 18 pp.

GERMAN, per, ~~in~~ Kunststoffe, Vol XLIX, 1959,
pp 401-406.

AEC Tr-4309

Sci - Phys
24 Feb 61

741,073

Theory of the Permeability of Plastic Film to
Gases, by N. Buchner.

GELLMAN, per, Kunststoffe, Vol XLIX, No 8,
1959, pp 401-406.

AEC-SCL-Tr-259

Sci-Phys
Jul 65

282, 61.

Kaum, Fritz.
SEWING OF CANVAS (Nähen von Planenstoffen). [1962]
[6]p. (illeg. omitted).
Order from SLA \$1.10

65-15587

Trans. of Kunststoffe (West Germany) 1959, v. 43,
no. 8, p. 430-432.

DESCRIPTORS: *Textiles, Machines, Manufacturing
methods.

65-15587

1. Title
1. Kaum, Fritz.

(Manufacture of Canvas, 1959, v. 43, no. 8)

Theory of Gas Permeability of Plastic Foils, by
N. Buchner, 18 pp.

GERMAN, per, ~~in~~ Kunststoffe, Vol XLIX, 1959,
pp 401-406.

AEC Tr-4309

Sci - Phys
24 Feb 61

Sci - Phys 44, 073

Theory of the Permeability of Plastic Film to
Gases, by N. Buchner.
GERMANY, per, Kunststoffe, Vol XLIX, No 8,
1959, pp 401-406.
AEC-ECL-TT-239

Sci-Phys
Jul 65

282, 613

Kaun, Fritz.
SEWING OF CANVAS (Nähen von Planenstoffen). [1962]
[6p. (figs. omitted).
Order from SLA \$1.10

63-15587

Trans. of Kunststoffe (West Germany) 1959, v. 49,
no. 8, p. 430-432.

DESCRIPTORS: *Textiles, Machines, Manufacturing
methods.

(Materials--Textiles, TT, v. 9, no. 10)

63-15587

1. Title: Canvas
1. Kaun, F.

Office of Technical Services

Lübbert, Wolfgang.
BONDING OF CANVAS (Kleben von Planenstoffen).
[1962] [16]p.
Order from SLA \$1.60

63-15582

Trans. of Kunststoffe (West Germany) 1959, v. 49,
no. 8, p. 432-434.

DESCRIPTORS: *Textiles, *Bonding, Adhesives,
Moistureproofing, Mechanical properties, Fibers
(Synthetic), Plastic coatings.

Synthetically coated canvas is bonded with elastic
synthetic adhesives. Examples of suitable raw
material bases are given of which acrylic rubber and
polychloroene butadienes are most important. The
adhesives obtained sometimes surpass the strength of
the basic material. Numerical tables concerning
tensile strength of bondings with respect to temper-
ature as well as data concerning comparable water
vapor resistance of unbonded and bonded films and
canvas are given. (Author)

63-15582

1. Title: Canvas
1. Lübbert, W.

(Material--Textiles,
TT, v. 49, no. 10)
Office of Technical Services

Wick, Georg and Weber, Gerhard.
A NEW PVC FOR PLASTISOLS: VESTOLITE SB 70.
[1963] 7p. (figs. refs. omitted).
Order from SLA \$11.10

63-14185

Trans. of Kunststoffe (West Germany) 1959, v. 49,
no. 9, p. 455-458.

DESCRIPTORS: *Polyvinyl chloride, Colloids,
Processing, Viscosity, Hardness, Tensile properties,
Plastics.

Vestolite SB 70 is a new kind of PVC, ideally suited
to pastes. In comparison with the ordinary kinds
heretofore, it is distinguished by a smaller content
in emulsifier, less water sensitivity and lower
viscosity in paste. The properties of this material
and its processing methods are discussed. (Author)

(Materials--Plastics, TT, v. 10, no. 3)

63-14185

1. Title: Vestolite
2. Title: Paste
1. Wick, G.
- II. Weber, G.

Office of Technical Services

60-18433

Hopff, Heinrich.
THE TECHNIQUE OF POLYMERIZATION. [1960] 22p.
Order from SLA m\$2.70, ph\$4.80 60-18433

1. Polymerization--Analysis
I. Hopff, H.

Trans. of Kunststoffe (West Germany) 1959. v. 49.
no. 10, p. 494-500.

143,037

Office of Technical Services

(Chemistry--Organic, TT, v. 5. no. 3)

Model Apparatus for the Continuous Preparation of
Polyethylene Using Ziegler Mixed Catalysts, by
Siegfried Sommer, Siegfried Wagener, Helmut
Ebner, 7 pp.

GERMAN, per, Kunststoffe, Vol XLIX, No 10,
1959, pp 500-502. 707527

SLA 60-14545

Sci.

Apr 61

OSR, Vol III, No 12

163,280

Ebersbach, Hans-Walter and Michl, Kari-Helm.
INTERNALLY PLASTICIZED POLYVINYL CHLORIDE:
CONTRIBUTION TO THE PROBLEM OF THE SHOCK
RESISTANT PVC. [1964] 13p
Order from K-H \$7.80

K-H-12798

Trans. of Kunststoffe (West Germany) 1959, v. 49
[no. 10] p. 513-516.
Another trans. is available from SLA \$1.60 as
TT-63-14186 [1963] 11p.

(Materials--Plastics, TT, v. 11, no. 11)

TT-64-12841

- I. Ebersbach, M. -W.
- II. Michl, K. -H.
- III. Title: Contribution ...
- IV. K-H-12798
- V. Kresge-Hooker Science
Library Association,
Detroit, Mich.

Office of Technical Services

Eberstadt, Heinz-Walter and Michl, Karl-Heinz.
INTERNALLY PLASTICIZED POLYVINYL CHLORIDE:
CONTRIBUTION TO THE PROBLEM OF THE SHOCK
RESISTANT PVCL [1964] 13p
Order from K-H \$7.80

K-H-12798

Trans. of Kunststoffe (West Germany) 1959, v. 49
[no. 10] p. 513-516.

Another trans. is available from SLA \$1.60 as
TT-63-14186 [1963] 11p.

TT-64-12841

- I. Eberstadt, H. -W.
- II. Michl, K. -H.
- III. Title: Contribution ...
- IV. K-H-12798
- V. Kraege-Hooker Science
Library Associates,
Detroit, Mich.

(Materials--Plastics, TT, v. 11, no. 11)

Office of Technical Services

20

Low Pressure Polyethylene Pipe for Drinking Water,
by K. Richard, E. Gaube, G. Dietrich, 31 pp.

GERMAN, P.M., Kunststoffe, Vol XLIX, No 10, Oct
1959, pp 515-525.

Dept of ~~State~~ Commerce
Dr Henry Birnbaum
Natl Bur of Standards

Sci - Engr
Mar 60

110,429

Making Plastics Processing More Economical by
Combining Operations, by R. Fritsch, G. Fahr.

GERMAN, per, Kunststoffe, Vol XLIX, No 10, 1959.
pp 543-546.

AMS 340-GJ

HTS 100-10

Sci - Chem

Aug 60

123,326

Richard, K., Gaube, E., and Diedrich, G.
TIME RESISTANCE OF PLASTIC PIPE: PVC AND
ZIEGLER POLYETHYLENE AS RAW MATERIALS.
[1963] 14p. (figs. omitted) 6 refs.
Order from SLA \$1.60

63-14187

Trans. of Kunststoffe (West Germany) 1959, v. 49,
no. 11, p. 616-621.

DESCRIPTORS: *Plastic tubing, *Pipes, *Polyvinyl
chloride, *Polyethylene plastics, Thermoplastics,
Stresses, Time, Tolerances (Mechanics), *Ziegler
catalysts, Ziegler catalysts.

In thermoplastic materials, which are to be mechani-
cally stressed for long periods, cold flow reduces the
stress capacity to a fraction of the short-term strength.
Pressure pipe must therefore be designed with stress
characteristics which are valid also for long periods of
(Materials--Plastics, TT, v. 10, no. 5) (over)

63-14187

I. Richard, K.
II. Gaube, E.
III. Diedrich, G.
IV. Title: PVC...

Office of Technical Services

Multiaxially Strengthened Films of Low Pressure
Polyolefins; Characteristics and Problems of
Orienting and Testing, by K. Richard, D. Dieckrich,
et al, 18 pp.

GERMAN, per, Kunststoffe, Vol XLIX, No 12, 1959,
pp 671-678.

SLA 60-14535

Sci

Apr 61

OPS, Vol III, No 12

163,278

62-10571

Kreiss, Manfred

ON THE INFLUENCE OF FILLERS ON THE STRUCTURE AND THE ELECTRICAL PROPERTIES OF PLASTICIZED PVC MIXTURES. [1961] 12p. (16 figs. omitted) 28 refs.

Order from SLA \$1.60

62-10571

Trans. of Kunststoffe (West Germany) 1959, v. 49, no. 12, p. 679-683.

DESCRIPTORS: *Polymers, *Vinyl chlorides, Chlorides, Plastics, Electrical properties, Molecular structure, *Binders, Electrical effects, Adsorption, Adhesion, *Plasticizers

On the basis of electrical measurements it is shown that fillers added to plasticized PVC mixtures chiefly absorb plasticizers. In addition, saponification products and other ions are adsorbed by the filler, and (Materials-Plastic, TT, v. 7, no. 10) (over)

1. Title: Fillers

I. Kreiss, M.

Office of Technical Services

Magat, Michel.

PREPARATION AND PROPERTIES OF GRAFT
POLYMERS. Nov 61 [6]p.

Order from SLA \$1.10

62-20024

Trans. of Kunststoffe (East Germany) 1960, v. 50,
no. 1, p. 57-59.

DESCRIPTORS: *Polymers, Preparation, Mechanical
properties, Polymerization

(Chemistry--Organic, TT. v. 9, no. 10)

62-20024

1. Title: Graft polymers
- I. Magat, M.

Office of Technical Services

63-18522

1. Fortun, E.

Fortun, Egmont.
CORRECT METHODS OF LAYING PLASTIC FLOOR
COVERINGS. [1963] 10p (figs. omitted)
Order from SLA \$1.10

63-18522

Trans. from Kunststoffe (West Germany) 1960
[v. 50, no. 2].

DESCRIPTORS: *Floors, *Plastics, *Tiles, Foundation
(Structures), Sheets, Civil engineering, Adhesives.

(Engineering--Civil, TT, v. 10, no. 11)

Office of Technical Services